A2 Cancel

7. [Amended] The process of claim 6 further comprising applying correction to the digital YUV signal such that the correction comprises at least one of [wherein correction is selected from the group consisting of gamma correction,] color saturation correction, tint correction, brightness correction and contrast correction.

A3

10. [Amended] The process of claim 6, wherein the received digital YUV video signal is encoded with a correction factor that is compensated for in [correcting] applying gamma correction to the digital YUV signal.

Cancel Sub B3

11. [Amended] A personal computer system comprising:

a processor;

a bus;

main memory;

a system controller;

a graphics controller;

a video source capable of providing a digital YUV video signal;

a video output capable of connecting to a video display device; and

a digital processor that [corrects] applies gamma correction to the digital YUV signal provided by the video source and provides a corrected signal to the video output.

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed March 1, 2000, and the references cited therewith.

Claims 1, 2, 6, 7, 10 and 11 are amended, no claims are canceled, and no claims are added; as a result, claims 1-11 are now pending in the application.

Applicants respectfully request reconsideration of the above-identified patent application as amended in view of the following remarks.

Rejections Under 35 U.S.C. § 102

Claims 1-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hannah (U.S. Patent No. 5,568,192).

Hannah discusses a system and method for processing digital video signals in the RGB color space and then converting the processed signals to the YUV color space as needed (*see, e.g.* col 5 ln 54-60; col 6, ln 54-56). Hannah also discusses a variety of digital signal image processing including gamma correction, but teaches that this conversion must be performed in the RGB color space (see, e.g. col. 6, ln 29-56).

In contrast, the present invention as claimed performs gamma correction and other video correction to digital video signals in the YUV color space and incorporates a digital processor that employs an algorithm that applies such correction to a digital YUV video signal. Because the cited reference does not teach, for example "a digital processor employing a corrective algorithm that applies gamma correction to the digital YUV signal" as claimed in claim 1, the claims as amended are distinct from the cited reference.

Because the cited reference does not teach all elements of the invention as claimed in independent claims 1 and 6 or the claims that depend therefrom, reexamination and allowance of the pending claims is respectfully requested.

Claims 1-4 and 6-9 were rejected under 35 U.S.C. § 102(e) as being anticipated by Anderson et al. (U.S. Patent No. 6,028,611). Applicant does not admit the reference is prior art, and reserves the right to swear behind the reference at a later date.

Anderson discusses use of a chain of linked image processors to process a digital video image. Anderson further discusses digital correction of an RGB video signal, followed by conversion of the signal to a YCrCb color space (see, e.g. col. 6, ln 22-28). Figure 7 relied upon by the Examiner also discloses the color space conversion at 502(f) subsequent to the correction cited in the same figure.

In contrast, the present invention performs gamma correction on a digital YUV signal. In some claimed embodiments, the invention further performs other correction to the digital YUV signal. Because Anderson does not disclose gamma correction or other correction performed on a digital YUV signal, the present invention as claimed is believed to be patentably distinct from this reference.

Applicant therefore respectfully requests reexamination and allowance of independent claims 1 and 6 which claim correction including gamma correction applied to digital YUV video, and requests allowance of the claims that depend therefrom.

Claims 1, 2, 4, 6, 7 and 9 were rejected under 35 U.S.C. § 102(e) as being anticipated by Eglit et al. (U.S. Patent No. 5,734,362). Applicant does not admit the reference is prior art, and reserves the right to swear behind the reference at a later date.

Eglit discloses a brightness control for liquid crystal displays, including brightness control provided within a motion video architecture data path 30 (see Fig. 2) that is operable to correct the brightness of a digital YUV signal and convert the signal to RGB for display. Eglit teaches that correction of the YUV signal consists of adding an 8-bit brightness value to the Y (luminance) portion of the YUV digital signal, to correct for brightness response of an LCD display.

In contrast, the present invention as claimed performs gamma correction on a digital YUV signal, and in select claimed embodiments performs other correction functions to a digital YUV signal in addition to gamma correction. Because the claims of the present invention as amended comprise performing gamma correction to digital YUV signals and the cited Eglit reference does not, the present invention is believed to be patentably distinct from the reference.

Applicant therefore respectfully requests reexamination and allowance of the pending independent claims 1 and 6, and allowance of the claims that depend therefrom.

Rejections Under 35 U.S.C. § 103

Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Eglit et al. (U.S. Patent No. 5,734,362). Applicant does not admit the reference is prior art, and reserves the right to swear behind the reference at a later date.

Eglit discloses a brightness control for liquid crystal displays, including brightness control provided within a motion video architecture data path 30 (see Fig. 2) that is operable to correct the brightness of a digital YUV signal and convert the signal to RGB for display. Eglit teaches that correction of the YUV signal consists of adding an 8-bit brightness value to the Y (luminance) portion of the YUV digital signal, to correct for brightness response of an LCD display. Eglit does not teach gamma correction or other correction to a digital YUV signal.

In contrast, the present invention performs gamma correction to a digital YUV signal, and in various embodiments provides additional correction to the digital YUV signal.

Because claim 11 as amended does not contain elements that correspond to or are obvious in light of disclosure of the Eglit patent, reexamination and allowance of claim 11 is respectfully requested.

CONCLUSION

Applicants believe the claims are in condition for allowance and request reconsideration of the application and allowance of the claims. The Examiner is invited to telephone the below-signed attorney at 612-349-9581 to discuss any questions which may remain with respect to the present application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-0439.

Respectfully submitted,

MARK RAPAICH

By their Representatives,

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Date May 30 2000 By _____
John M. Dahl
Reg. No. 44,639

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner of Patents, Washington, D.C. 20231 on May 30, 2000.

_____ _____
Name Signature